

### **REMARKS/ARGUMENTS**

In the Office Action issued August 21, 2006, The drawings were objected to because Figure 1 was not designated as prior art. Claims 1-23 were rejected under 35 U.S.C. §112, second paragraph as being indefinite. Claims 1-23 were also rejected under 35 U.S.C. §101 as directed to nonstatutory subject matter. Claims 1-23 were rejected on the ground of nonstatutory obviousness-type double patenting. Claim 1-23 were rejected under 35 U.S.C. §102(b) as anticipated by, or under 35 U.S.C. §103 as unpatentable over, Kim et al. was amended and claims 1-5 and 7-9 are pending in the application.

#### **The Drawings**

The Applicant has amended the drawings so that Figure 1 is designated as prior art. Accordingly, the objection is believed to be overcome and thus withdrawal of the objection is requested.

#### **35 U.S.C. §112**

The Examiner rejected claims 1-23 under 35 U.S.C. §112, second paragraph as being indefinite. The Applicant has amended claim 1, 19, 20, 22 to recite that the compared geometries and filtering condition are used to determine whether one of the compared geometries meets a specified condition. Accordingly, the rejection is believed to be overcome and thus withdrawal of the rejection is requested.

#### **35 U.S.C. §101**

Claims 1-23 were also rejected under 35 U.S.C. §101 as directed to nonstatutory

subject matter. The Applicant has amended claim 1, 19, 20, 22 so that they produce a concrete and tangible result, such as determining whether the second geometry satisfies a first filter condition with respect to the first geometry, and if the first filter condition is satisfied, providing the second geometry to a query result set, otherwise, providing the first geometry and the second geometry to a second filter configured to perform processing on the first geometry and the second geometry. Accordingly, the rejection is believed to be overcome and thus withdrawal of the rejection is requested.

### **Double Patenting**

Claims 1-23 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over a co-pending application. The Applicant will file a terminal disclaimer in the application at such time when one of the applications is deemed to have allowable subject matter. Accordingly, the rejection is believed to be overcome and thus withdrawal of the rejection is requested.

### **35 U.S.C. §101**

Claims 1-23 were rejected under 35 U.S.C. §102(b) as anticipated by, or under 35 U.S.C. §103 as unpatentable over U.S. Patent 6,438,269 issued to Kim et al.

Claims 1, 19, 20, and 22, as amended now recite comparing a computed distance to determine whether the second geometry satisfies a first filter condition with respect to the first geometry, and if the first filter condition is satisfied, providing the second geometry to a query result set, otherwise, providing the first geometry and the second

geometry to a second filter configured to perform processing on the first geometry and the second geometry. The present invention eliminates the need to perform expensive and time consuming processing of geometries to determine if they meet the requirements of a query.

In contrast, Kim merely teaches conventional spatial query processing. Kim discloses that a minimum bounding rectangle is extracted in regard to a spatial object. A spatial index is constructed by using the Minimum Bounding Rectangle of object. A spatial query is received by a user in regard to the constructed spatial index. A candidate object satisfactory to the spatial query is determined by comparing the minimum bounding rectangle (MBR) of a domain object given from the spatial query with the Minimum Bounding Rectangle of the constructed spatial object constructed. If a candidate object satisfactory to the spatial query is not selected another object is filter-processed by comparing the Minimum Bounding Rectangle of the domain object on demand of the spatial query with the Minimum Bounding Rectangle of the non-filter-processed spatial object among the constructed spatial object. On the other hand, if the candidate object is selected the object is refinement-processed by comparing a real shape of the selected candidate object with real shape of the domain object given at the spatial query. Kim fails to teach the limitations as claimed by claims 1, 19, 20, and 22 of the present invention. Accordingly, Kim fails to teach or make obvious the invention claimed by claims 1, 19, 20, and 22.

Claims 1-23 were rejected under 35 U.S.C. §102(b) as anticipated by Kothuri '01 and Kothuri '01.

Claims 1, 19, 20, and 22, as amended now recite comparing a computed distance to determine whether the second geometry satisfies a first filter condition with respect to the first geometry, and if the first filter condition is satisfied, providing the second geometry to a query result set, otherwise, providing the first geometry and the second geometry to a second filter configured to perform processing on the first geometry and the second geometry.

Kothuri '01 and Kothuri '02 teach that techniques can be used based on relationships between objects to forego expensive and time consuming processing that is typically performed on objects by spatial indexes. However, Kothuri '01 and '02 fail to teach the specific technique disclosed by the present invention. Neither Kothuri '01 or Kothuri '02 teach the specific limitation of comparing a computed distance to determine whether the second geometry satisfies a first filter condition recited by claims 1, 19, 20 and 22. Accordingly, claims 1, 19, 20, and 22 are not taught or suggested by Kothuri '01 or Kothuri '02.

All claims are believed to be in condition for allowance. If the Examiner has any questions about this amendment and to facilitate prosecution, the Examiner is encouraged to call the undersigned attorney. The Commissioner is hereby authorized to charge any

insufficient fees or credit any overpayment associated with this application to Deposit  
Account No. 19-5127 referencing 19111.0098.

Respectfully submitted,

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